

# Zion

## Fire & Aviation Management

National Park Service  
U.S. Department of the Interior



# Annual Report 2004



New Emergency Operations Center  
Zion National Park

## 2004 Season Overview

The 2004 season was another busy one for Zion National Park's Fire and Aviation Management Program and its staff of 41 people (both seasonal and permanent). It also brought some big and exciting changes for the program with the construction of a new state of the art Emergency Operations Center where fire management offices, fitness equipment, wildland engine bays, and storage caches are now located within a single building. Zion also established a new fire repeater on top of West Temple, so that all fire dispatching could be coordinated through the Color Country Interagency Fire Center.

Zion was in severity fire funding for much of the season and fire restrictions were once again enacted for the third year in a row. Additional staffing was brought in from various agencies including NPS (Grand Canyon, Grand Teton and Guadalupe Mountains), BLM, FWS, and FS to support the local fire severity and ongoing wildland fires.

Zion had 24 wildland fires in 2004, including one which was managed for fire use/resource benefits (.1 acre) and two others (4 acres and 6 acres) which were managed under confinement/containment strategies. Zion was also involved in initial attack on another 28 wildland fires within its established response zone as well as supporting numerous, large fires with the Color Country Interagency Fire Management Area.

Zion finally accomplished the 4,400 acre Clear Trap Prescribed Fire, largest in the parks history. This burn was located along the park's eastern boundary adjacent to the East Zion Focus Area, an area identified by the Color Country Interagency Fire Management Area, in conjunction with the National Fire Plan, as one in need of immediate fuel reduction treatment to protect communities/properties at risk from wildland fires.

Zion is in the final phases of completing its update of the 1993 Fire Management Plan. Four scoping meetings were held in local communities to get public comments on the Environmental Assessment and its preferred alternative to allow a more comprehensive fire management program. The plan is scheduled to be implemented in the spring of 2005 and will guide the park's fire program for the next 10-20 years.

Zion also assisted with the fire management programs of its seven cluster parks (BRCA, PISP, TICA, GOSP, CEBR, GLCA, and CARE). Zion supported all fire management activities in these parks including over 1500 acres of prescribed fire in BRCA, fuel treatment projects at TICA and CEBR and assisted in the production of fire management plans for all the cluster parks.

Zion continues its tradition of interagency cooperation as a member of the Color Country Interagency Fire Management Area. This group helps to promote safe and effective fire management in Color Country through interagency cooperation and coordination. In fact, the group received the prestigious Pulaski Award (2004), a national award given each year that recognizes outstanding group contributions to interagency wildland firefighting and management. The area also had a record wildland fire season with over 800 fires reported.

## 2004 Season Highlights

- Completion and occupancy of Zion's Emergency Operations Center
- Management of 24 wildland fires within the park totaling 21.2 acres
- Initial attacked another 28 wildland fires within Zion's response zone, outside of the park boundary
- 108 interagency support actions outside the park
- 14 fuel treatments involving 4,749 acres in Zion
- Successful completion of the 4,400 acre Clear Trap Prescribed Fire; the largest in the park's history
- Position realignment to create an Assistant Fire Management Officer Position
- Creation of a Zion Fire Management webpage ([www.nps.gov/Fire/Index.htm](http://www.nps.gov/Fire/Index.htm))
- Creation and dissemination of a Zion Fire Management brochure
- Assistance with the production and completion of four Community Fire Plans and assistance with other communities in the planning phase
- Completed 14 Wildland Fire Community Hazard Risk Assessments
- Continued to use local contract crews, where feasible, for fuels treatment projects
- The Color Country Interagency Fire Management Area (including Zion) received the prestigious Pulaski Award for interagency cooperation and coordination
- The establishment of a new in-park repeater to facilitate area wide communication for fire management activities
- Four scoping meetings held in local communities dealing with the Environmental Assessment for Zion's Fire Management Plan
- Fire restrictions were in effect for third year in a row 7/14 – 8/20
- Received severity funding for additional staffing from mid-June through August
- 128 operational shifts for the Fire Use Module, highest in the Intermountain Region, including a 21-day assignment in Alaska
- Zion Helitak Module flew approximately 190 hours in support of fire operations throughout Color Country
- A record number of wildland fires (800+) in the Color Country Interagency Fire Management Area
- No time off injuries during the season



One of two Type 6 wildland engines in Zion NP



# Fire Effects Monitoring Program



Fire effects monitoring in Lake Mead NRA

Zion National Park is host to the Utah/Great Basin Fire Effects Module. This crew serves National Park Service units within this geographic region. This year will be the last year for work at Lake Mead NRA and Great Basin National Park. These parks are being returned to the Pacific West Region. Most of our workload was completed this year. The fire ecology / fire effects organization did a lot of work with a smaller crew due to budget cuts and position vacancies. In the month of August, Claire Crow, the fire effects crew lead returned to school in Arizona to work on a masters degree. In October, Henry Bastian, the fire ecologist took a job with the Department of the Interior in Washington, D.C.

## **Park Units Serviced for Fire Effects Monitoring / Fire Ecology / Fire Management Planning / Photo Monitoring:**

Zion NP, Bryce Canyon NP, Golden Spike NHS, Mesa Verde NP, Arches NP, Great Basin NP, and Lake Mead NRA

## **Park Units Serviced for Fire Ecology / Fire Management Planning and Photo Monitoring:**

Glen Canyon NRA, Timpanogos Cave NM, Cedar Breaks NM, Pipe Spring NM, Capital Reef NP.

### **Zion**

The fire effects accomplished monitoring as well as supported the park and the Color Country Fire Management Area with fire assignments. The fire effects crew also supported the Bandelier Fire Effects Module with work at El Malpais NM. Monitoring plots were sampled in the Blue Creek, North Gate Peaks, Clear Trap, Pocket Mesa, and Weeping Rock burn units. The Fire Effects Monitoring Plan was also completed in a draft form. It is currently out for review. Significant work was done on the Fire Management Plan Environmental Assessment. It is in the final stages.

### **Bryce Canyon**

Monitoring at Bryce Canyon consisted of immediate post burn monitoring of the Paria Burn Unit plots. GPS data was collected and re-collected on most of the fire effects plots. Previous years GPS data had been collected but problems with batteries, GPS signals, and accuracy were encountered. It is hoped that this year's work will get this data in a format that will serve future monitoring needs. The Fire Effects Monitoring Plan was also completed in a draft form. It is currently out for review. Significant work was done on the Fire Management Plan Environmental Assessment. Monitoring plots were re-measured in the Paria and East Creek Meadow burn units.

## **Golden Spike**

Work at Golden Spike included completion of the historical photographs project. This project re-documented landscape scenes to capture the changes that have occurred in the vegetation. Further work will be needed on this project to adequately document and capture vegetation change. The Fire Effects Monitoring Plan was also completed in a draft form. It is currently out for review. Significant work was done on the Fire Management Plan. It is in the final stages.

## **Great Basin**

Great Basin was not scheduled to be visited this year and no burns were completed that required monitoring plots to be sampled.



Measuring Ponderosa Pine DBH

## **Lake Mead**

The Zion Fire Effects crew with assistance from the Great Smoky Mountains and Grand Canyon Fire Effects Crews completed two trips to the recreation area this year for monitoring purposes. Monitoring was performed in the Horse Valley, Pine Valley Ranch, Pleasant Valley, Pleasant Valley East, Pine Valley loop, Green Springs, and Twin West treatment units.

## **Mesa Verde**

Fire management planning support was provided along with multiple trips from the fire effects crew to work on the MEVE vegetation mapping project in concert with the Inventory and Monitoring vegetation work. This effort was supported by the Bandelier Fire Effects Crew. The crew focused on collecting fire and fuels data. Many plots were installed and sampled. The crew did a great job. Work was also done on the Fire Management Plan Environmental Impact Statement.

## **Arches**

Arches NP was scheduled to be visited this year, but the work was completed by Charlie Shelz as has been done in past years. The data will be sent later in the year to Zion.

## Fire Information and Education

The Fire Information and Education program at Zion is coordinated by the Fire Information and Education Specialist (FIES) whose primary responsibility is to establish and coordinate internal and external fire information, education and prevention programs in order to present an integrated interdisciplinary fire program within Zion (and the other Utah cluster parks) and the National Park Service (NPS) as a whole.

FY 2004 was another busy year for the Information and Education portion of Zion's Fire Management Program. The park experienced 24 wildland fires, including one fire use fire and initiated one major prescribed fire (the 4,400-acre Clear Trap Rx) during the season, with the FIES serving as Information Officer (IOF) on all these incidents. These incidents required the production and dissemination of fire information, both internally and externally, and in a variety of mediums, including press releases, media interviews, park memos, posters and webpages.



Fire information station during the Clear Trap Prescribed Fire

During the year the FIES produced three fire information/education related working plans for Zion including, an Information/Education Plan (Strategy), A Fire Restriction Plan and a Prescribed Fire Information Plan. The FIES also produced numerous fire-related brochures, posters, handouts, site bulletins, and other information for Zion and the NPS. The messages were delivered in an assortment of mediums, both directly and indirectly, and by a wide variety of individuals, including the FIES, fire staff, park interpreters, resource management staff, and IOFs assisting the FIES.

One of the major accomplishments of the year was the creation of a wildland fire webpage ([www.nps.gov/zion/Fire/Index.htm](http://www.nps.gov/zion/Fire/Index.htm)), which is hosted by Zion's main webpage. The site contains a wealth of information regarding wildland fire management in Zion and the NPS.

The FIES is a member of Suwyn's Type II Incident Management Team serving as an IOF2. The team was assigned to two wildland fires in 2004, one in Utah and the other in Idaho. The FEIS also served as an IOF2 on three wildland fire assignments in Color Country and three prescribed burns, including two in Bryce Canyon and one in Zion. All of these fire events, especially the prescribed burns, depended heavily upon the timely and accurate dissemination of information to the public, staff and media.

The FIES serves as the NPS representative and Chairperson for the Color Country Interagency Information and Education Committee, a very active group that produces and disseminates wildland fire-related information and educational materials/programs. This committee is part of a larger group known as the Color Country Interagency Fire Management Area that coordinates fire management activities throughout Southwestern Utah and northwestern Arizona. In 2004, this group was presented with the prestigious Pulaski Award, a national award that represents its achievements in interagency cooperation and coordination in managing wildland fire.

The FIES also serves as the NPS representative on two other interagency committees including, the Great Basin Fire Education and Prevention Committee and the Utah Fire Communications Committee.

As well as the FIES duties in the Fire Management Program, the position also assisted with the Public Information Program in the park. This required the production of numerous press releases, media interviews, a park profile, managing the park's website and being a member of various park committees and work groups.

Following is a list of specific fire-related information/education activities for both Zion and associated national parks and the Color Country Interagency Fire Management Area. There are no exact figures for the number of people contacted in FY 2004 concerning non-personal fire-related messages, but it certainly numbered in the thousands.

## **Zion and other NPS Cluster Parks 2004**

<b>Information/Education Activity</b>	<b>Staff</b>	<b>Efforts</b>	<b>Contacts</b>
<b>Personal</b>			
Evening program (Fire)	Interpretation	34	2445
Patio talks (Fire)	Interpretation	14	256
Earth Day Booth	FIES, staff	1	1011
Informal roving during fire activities	FIES, staff	24	560
FMP EA Scoping Meetings	FIES, staff	5	55
FMP EA Scoping Meetings Mailings	FIES, staff	-	176
Community Fire Plan Meetings	FIES, staff	5	27
Zion Staff Training	FEIS, staff	3	<u>53</u>
			<b>4,483</b>
<b>Non-personal</b>			
Fire Webpage	FIES	on-going	-
Success Stories	FIES	9	-
NPS Fire Reporting	FIES	4	-
Fire Press Releases	FIES	6	-
Fire Posters	FIES	7	-
Zion Fire Site Bulletin	FEIS	1	-
Fire Restriction Newspaper Ads	FEIS	1	-
Bulletin Boards in Zion	FEIS	25	-
KCSG-TV Interview (Season outlook)	FEIS	1	-
Spectrum Newspaper (Season outlook)	FEIS	1	-



## Zion Fire Use Module

The Zion Fire Use Module completed a safe and successful 2004 in its second season as a 10-person prototype module, assisting with wildland fire suppression, wildland fire use, prescribed fire and hazard fuels projects. They traveled over 12,000 miles and spent a total of 128 shifts on assignments, including a trip to Alaska where they spent 19 shifts assigned to the Pingo Fire. The module experienced a major change during the season, as they moved into the new Interagency Fire Center in Cedar City, which also houses the Dixie NF and Cedar City BLM fire staffs. This move allowed the module the opportunity to interact and cooperate with the other interagency fire personnel from Color Country. The module also took on 10 detailers throughout the season from various agencies in Color Country and sent six of their own to details with other local agencies. Many of the module crew received needed fire-related training classes during the year.



Zion Fire Use Module 2004

## Zion Fire Use Module Accomplishments Summary 2004

	<b>Projects</b>	<b>Acres</b>
Wildland Fire Use	6	552,745
Wildland Fire Suppression	23	345,218
Prescribed Fire Execution	14	13,002
Prescribed Fire Preparation	5	-

## Zion Fire Use Module Work Summary 2004

<b>TASK</b>	<b>Person Days Worked</b>	<b>2004</b>	<b>Average (96-03)</b>
Wildland Fire: Suppression	284	17.3%	12.2%
Prescribed Fire: Execution	270	16.5%	12.1%
Travel	102	6.2%	11.6%
Module Operations	198	12.1%	12.1%
Wildland Fire: Resource Benefits	341	20.8%	29.5%
Training	145	8.9%	8.6%
Prescribed Fire: Preparation	119	7.3%	7.5%
Hazard Fuels	95	5.8%	3.7%
Prescribed Fire: Planning	15	0.9%	0.6%
Fire Effects Plot Work	69	4.2%	1.3%

**TOTAL –1638**



## Zion Helitak Module 2004

The eight-person Zion Helitak Module experienced its fourth season overall and its second in the Cedar City Interagency Air Center. The crew utilized the contract services of Classic Helicopters which provided an A-Star Helicopter (Type 3) with pilot and fuel truck for the season. They logged nearly 190 hours of flight time in 2004 benefiting all of the agencies in the Color Country Area with fire management and other types of support activities. Zion National Park used their services for wildland fire initial attack, prescribed fire, recon flights, search and rescue, and for assisting in the construction of the West Temple Radio Repeater. The module initial attacked 15 wildland fires and supported another 35 throughout the Color Country Fire

Management Zone. They also assisted with prescribed fire, resource missions and medivac/search and rescue operations in the area. One of the more interesting support actions during the season was the use of the helicopter and module to assist in the extraction of some large dinosaur bones form the Grand Staircase/Escalante National Monument.



Zion Helitak contract helicopter 2004

## Zion National Park Contract Helicopter 2004

<b>Benefiting Agency</b>	<b>Flight Hours</b>
Zion NP	52.3
Bryce Canyon NP	3.9
Dinosaur NP	7.3
Dixie NF	39.0
Utah State	27.7
BLM - Cedar City	40.7
Fishlake NF	9.0
BLM – Grand Staircase/Escalante	7.3
All others	<u>1.6</u>
<b>Total Flight Hours</b>	<b>188.8</b>

# Fuels Treatment Projects 2004

Project	Treatment Type	Acres
Clear Trap Blackline WUI	Underburn	44
Pine Creek & Administration WUI	Mechanical Thinning & Piling	20
Pine Creek & Administration WUI	Pile Burn	12
East Mesa Fuelbreak WUI	Mechanical Thinning & Piling	24
Kolob Canyons Visitor Center WUI	Pile Burn	52
Lodge & Watchman Housing WUI	Pile Burn	22
Rockville Bench WUI	Pile Burn	4
Zion Canyon Fire Break	Mowing	104
Lava Point Aspen Project WUI	Mechanical Thinning	20
Fire Pit Knoll Defensible Space WUI	Pile Burn	1
East Entrance Boundary WUI	Pile Burn	11
East Mesa Boundary WUI	Pile Burn	9
Clear Trap Rx (WUI)	Broadcast Burn	4,416
Zion Lodge WUI	Pile Burn	<u>10</u>
		<b>4,749</b>

## Communities Protected

- East Zion - (Focus Area of the Color Country Interagency Fire Management Area)  
Little Ponderosa Subdivision  
Zion Estates
- Kolob - (Focus Area of the Color Country Interagency Fire Management Area)
- Zion National Park Infrastructures



East Boundary Fuel Reduction Project



Mowing exotics in Zion Canyon

## Zion NP Wildland Fires – 2004

Fire Name	Date	Cause	Action Taken	Acres
Kolob Terrace 1	6/15	Lightning	Suppression	.2
Kolob Terrace 2	6/15	Lightning	Suppression	.5
Oak Creek Canyon	6/27	Lightning	Natural Out	.1
East Rim	6/29	Lightning	Suppression	.5
Hawk	6/29	Lightning	Suppression	.5
Camp Creek	7/17	Lightning	Suppression	.1
Chinle 1	7/19	Lightning	Suppression	.1
Chinle 2	7/19	Lightning	Natural Out	.1
Point	7/20	Lightning	Suppression	.2
North Sacrifice	7/24	Lightning	Confine & Contain	6
South	7/25	Lightning	Suppression	.1
North	7/26	Lightning	Suppression	.1
Narrows	7/31	Lightning	Suppression	.5
Crazy Quilt	8/2	Lightning	Natural Out	.5
East Rim 2	8/5	Lightning	Suppression	.1
Jolley	8/5	Lightning	Suppression	.1
Gulch	8/5	Lightning	Suppression	.1
Horse	8/12	Lightning	Suppression	7
Phantom	8/13	Lightning	Fire Use	.1
Lee Valley	8/17	Lightning	Suppression	.1
Cougar	9/9	Lightning	Confine & Contain	4
Horse Pasture	9/18	Lightning	Natural Out	.1
South Campground	9/26	Human	Suppression	.1
				<b>21.2</b>

### Out of Park Assignments

Initial Attack Wildland Fires (within Zion's Response Area) – 28

Support Assignments - 108



Hawk Wildland Fire, Zion NP 2004



Cougar Wildland Fire, Zion NP 2004

## **Zion Fire Business Management**

Fire Management at Zion National Park is a highly complex program incorporating a full range of management objectives. In order to achieve program goals, the authorized funding in fiscal year 2004 was nearly \$2.4 million. This included 9 FIREPRO base, 14 projects, and 30 wildfire accounts. All fire related fiscal and administrative duties are accomplished by the Fire Program Management Assistant. The FMPA provides expertise in Incident Business Management to Zion as well as the 7 other parks in the Utah Group.

The FMPA processes all travel, payroll, personnel and procurement actions. The busy 2004 fire year resulted in the completion of over 400 travel vouchers. Each travel is complex and time consuming often allocating costs to several accounts. In addition, nearly 400 requisitions were processed.

### **FY 2004: Authorized Funding**

<b>FIREPRO</b>	<b>Authorized</b>
Readiness	\$864,915
Fuels Management	\$444,566
Fuels Projects - Prescribed Fire	\$102,178
Fire Effects Monitoring	\$177,286
Fuels Projects - Mechanical	\$66,000
WUI Program Management	\$106,066
WUI Projects - Prescribed Fire	\$133,055
WUI Compliance & Community Assistance	\$124,900
WUI Projects - Mechanical	\$96,200
Wildfires, Severity & Step-Up	\$227,359
Regional Training Dollars	\$3,000
<b>Total</b>	<b>\$2,345,525</b>



# **2004 Zion Fire and Aviation Management Staff**

## **Permanent Staff**

Fire Management Officer - Jan Passek  
Assistant Fire Management Officer – Jeff Hickerson  
Fire Management Program Assistant – Paula Reese  
Fire Program Clerk - Bonnie Suerig  
Fire Ecologist – Henry Bastian  
Lead Fire Effects Monitor – Claire Crow  
Fire Information/Education Specialist – David Eaker  
Station Manager – James Courtright  
Engine Supervisor – Jessica Grow  
Engine Supervisor - Vacant

## **Fuels Crew**

Fuels Crew Leader - Shane Paxton  
Forestry Technician - Bryce Mulholland  
Forestry Technician - Jen Layton

## **Helitak Module**

Lead – Jim Edge  
Assistant Lead – John Ryan  
Crewmember - Curtis Ritzman

## **Fire Use Module**

Module Leader – Sean Gaines  
Assistant Module Leader – Steve Smith  
Lead Crewmember - Susan Bissell  
Lead Crewmember – Alex Viktora  
Rob Gomon – Crewmember  
Greg Bartin – Crewmember  
Carol Fields – Crew Member



Zion Fire and Aviation Management Staff 2004  
(not all present)

## **Bryce Canyon**

Fuels Specialist - Bruce Fields  
Fuels Technician - Kristen Meyer

## **Seasonal Staff**

Brian Hatfield – Fire Effects Crew (partial season)  
Janet Hatfield – Fire Effects Crew (partial season)  
Alina Cansler – Fire Effects Crew  
Robbie Hanawacker – Fire Effects Crew (partial season)  
Patrick Garner – Fire Effects Crew (partial season)

Sarah Cooper – Engine Crew  
David Lammers – Engine Crew  
Brian Bird – Engine Crew  
Brody Greer – Engine Crew (partial season)  
Trent Cherry – Engine Crew

Ben Suerig – Fuels Crew (partial season)  
Zach Chappell – Fuels Crew  
Andrea Castro – Fuels Crew

Troy Eggers – Fire Use Module  
Trevor Pollock – Fire Use Module (partial season)  
Travis Hartsburg – Fire Use Module

Joseph Rodriguez – Helitak Module  
Robert Bailey – Helitak Module  
John Yohe – Helitak Module  
Rachel Stoughton – Helitak Module  
Jena Ferrarese – Helitak Module  
Michelle Cahill – Helitak Module



Fire shelter training 2004

*National Park Service wildland fire management activities are essential to the protection of human life, personal property and irreplaceable natural and cultural resources, and to the accomplishment of the NPS mission.*

Director's Order #18